VOICE INTERFACE AND METHODS FOR IMPROVING RECOGNITION ACCURACY OF VOICE SEARCH QUERIES

Abstract of the Disclosure

A system and associated methods are disclosed for improving voice recognition accuracy when a user conducts a search by voice. One method involves prompting the user to enter a set of characters of the query (e.g., the first N letters of a query term), and then using these letters to execute a preliminary search. The results of the preliminary search are then used to generate a dynamic grammar for interpreting the full voice query. The grammar may alternatively be retrieved from a cache or other memory that stores the grammars for various combinations of letters. In one embodiment, the user enters the characters by selecting the corresponding keys on a standard telephone keypad (one depression per letter) and then saying the letters, and the keypad entries are used to reduce the number of possible interpretations of each character utterance. Another method, which is useful for search refinement, involves generating a dynamic grammar from a set of search results (e.g., when the number of hits is large), and then using this grammar to interpret utterances of additional query terms to be added to the query.